



Infrastructure Committee Report

Town of Middlebury

for November 12, 2020

Harris and Harris Consulting, Inc. was retained in mid-2015 to conduct a **Facilities Needs Assessment** on behalf of the Departments of Public Works & Middlebury Police.

The facilities involved in this Needs Assessment included:

PUBLIC WORKS DEPARTMENT

- "Sonny Cyr" Buildings and Site at 1020 Route 7 South
- Salt Facility and Site, Route 7 South, east side

POLICE DEPARTMENT

- Storage in the Waste Water Control Building at Police Dept Site

Our 2015 Facilities Needs Assessment for the Police Department resulted in the 2020 / 21 re-purposing project for the former Sand Filter Building on the PD campus into a vehicle parking facility, **and for the Control Building** to house the Command Center, support vehicles, forensic activities, trailers, impound vehicle containment, and a radio contractor bay. Additional space will be provided for tools and materials storage, bicycle storage, and officer training.

This project took precedence over the Department of Public Works Department because it involved life-saving intervention measures for two existing Town of Middlebury Buildings, in danger of deterioration beyond repair.

PUBLIC WORKS DEPARTMENT Programming Study

Following is a summary of the **2015 Facilities Needs Assessment for DPW.**

1020 ROUTE 7 South.

A detailed program study revealed that the existing BUILDING(s) SIZE at a combined 13,313 sf is inadequate by +/- 10,000 sf. The Minimum Target footage should be around 23,000 sf. (2020 update suggests 25,000 sf)

BUILDING CONDITION

The current DPW Facility has been adequately maintained since its construction in 1990. However, the following listing enumerates inherent deficiencies that 25 years of hard use and change have brought forward:

- Code Violations including handicapped accessibility, life safety, lack of oil / water separation systems, hazardous materials handling and storage, lack of attic storage fire separation.
- Environmental concerns (air quality, ventilation) for garage and offices
- The lockers, lunch room, and toilet rooms are severely undersized for the number of employees on staff, and not handicapped accessible.
- Operational issues including an interior traffic pattern that is unsafe (mechanics' area is corridor for other user groups), inside vehicle parking conflicting with mechanics' use of repair bays
- Architectural issues: exterior masonry sills are deteriorating, the envelope is under-insulated with excessive air infiltration, lack of trench drains, gable roof eaves pitch to overhead doors
- Storage issues: storage for highway equipment and tools for both the highway and water departments as well as are inefficiently scattered in various spaces, and inadequate in size and configuration.
- The building is not sprinklered.
- The "pole" building has no slab, and is not environmentally controlled. It has extensive roof leaks.

SITE SIZE

The current site is **substantially insufficient** (1.87 acres should be a minimum of 4 acres) to accommodate an appropriate building or buildings, and accompanying circulation and parking.

SITE CHARACTERISTICS

The current site is generally well situated in terms of service proximity to the town's road and utility networks. Deficiencies however, include:

- The existing site is severely encumbered by legal rights of way of two abutting properties, (Champlain Construction and Danyow Residence) making expansion difficult, and creating a non-securable facility.
- Circulation patterns and turning radii are inadequate for this facility's uses and vehicle types.
- Parking areas for personnel and staged vehicles are inadequate and not defined. Parked vehicles impede operations and cause accidental damage.
- Access to and from site is difficult / dangerous due to site lines, speed of traffic on Route 7, and the slow-moving nature of DPW vehicles and trailers. Left turns are especially difficult, and crossing over Route 7 to access the Salt Facility is extremely dangerous.

SITE EXPANSION Guidelines

This **site is not readily expandable** by acquisition of adjacent properties. Already encumbered by rights of way for Champlain Construction and the C. Danyow residence, expansion of the existing facility to the west or south is not possible. To the north lies the "Rosie's" property. Adjacent to the Cyr facility, these lands remain unused and largely unusable due to a combination of wetlands and ledge outcroppings.

B. Salt Facility and Site, Route 7 South, East Side

BUILDING SIZE

The salt shed itself (100 x 70) is **undersized by approximately 10 – 15%**. Expansion or replacement is needed to reduce losses and environmental hazards from leaching. A cold-patch area needs to be created for off-season asphaltic repairs.

In addition, 5 U-shaped concrete structures should be constructed to contain and protect bulk materials. Five bins @ 20'W x 30'D x 8'H would be used for ¾" gravel, ¾" stone, municipal mix gravel, top soil, and 4"-6" erosion stone. Additional: One structure 15'W x 20'D x Height (TBD) covered for hay storage –needs a roof and 8' door opening; One structure for cold patch 15'W x 20'D with a door opening 10' W by 12' H.- (roof height to be determined) Improved storage systems for piping and water department parts are also needed.

BUILDING CONDITION

The salt shed cover is nearing the end of its serviceable life, at 15 years. Also, its foundation should be re-built properly to current performance standards. Perhaps a new structure should be considered in the near future, adjacent the existing to allow for continued operations and improved site utilization. Demolition of the existing would promote a more efficient use of the lands available to the east.

SITE SIZE

The existing site at 4.8 acres is deceiving. Much of the acreage consists of steep ledge, making expansion difficult, but not impossible. Ledge, if removed, could provide re-usable materials for roadway construction projects. The acquisition of additional property should be considered for access improvements as well as possible expansion and co-location with the headquarters facility.

SITE CHARACTERISTICS

The hidden nature of this site is an asset. However,

- The access drive is steep enough to be unsafe. (approx 1:3)

- A second access drive should be introduced to create a manageable and safe traffic pattern.
- The site is difficult to secure.

SITE EXPANSION Guidelines (2015)

This site is readily expandable provided adjacent property can be acquired at reasonable cost. **Foster Brothers to the north and east offers the best opportunity for expansion.**

Advantages of exploring this strategy include:

- An increased lot size of +/- 10 acres, allowing the DPW headquarters building and salt facility to occupy the same or adjacent pieces of land.
- Allowing a more reasonable and safe access to the combined site via extension of existing roadways and utilities (Boardman Street / Wilson Road)
- Elimination of frequent two-lane crossing through the high speed traffic of Rte 7.
- Greater efficiency of operations and supervision / security for the campus

PUBLIC WORKS DEPARTMENT Programming Study

2020 UPDATE

CURRENT ACTIVITIES INCLUDE:

- ✚ **Ongoing discussions with the Foster family regarding potential purchase of an approximate 5-acre parcel immediately north of the existing Salt Facility Site, Route 7 South, East side.**
- ✚ **Explorations of this site's potential with Otter Creek Engineering and Jen Murray, Town of Middlebury Director of Planning and Zoning.**
- ✚ **Harris & Harris Consulting, Inc.:**
 - **Revisiting of the Program Statement prepared in 2015 for changes in program elements and ideal environments for each.**
 - **Creation of block diagrams / floor plan templates**
 - **Arranging of building complex templates on the proposed Foster family site, including on-site circulation and parking, connection to the Salt Shed site, and ideal access points to public roadways.**